

# R O C K C Y C L E P R O J E C T O V E R V I E W

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<b>Name of Project:</b>	It's A Hard Rock Life!			<b>Duration:</b>	3 weeks
<b>Subject/Course:</b>	6th Grade Science	<b>Teacher(s):</b> T. Covington, Cravens, Knight	<b>Grade Level:</b>	6	
<b>Other Subject Areas to be Included:</b>	ELA (writing)				
<b>Project Idea</b> Summary of the issue, challenge, investigation, scenario, or problem:	Students will use their knowledge of minerals and the rock cycle to analyze proposed building sites in Wylie, TX for a new research facility for Geology On The Go. After analyzing each site, they will write a 1 page recommendation letter that will explain which building site they believe to be best and why. In addition, they will create a product that contains information on the rocks, their history and their uses. Student groups will present to each other and each student will vote on which is the best (not their own). Final groups will present to experts in the field.				
<b>Driving Question</b>	How can we use our understanding of rocks and minerals to select the best site for the building of a new Geology On The Go research facility in Wylie?				
<b>Content Standards</b> to be taught and assessed:	<b>6.6A</b> compare metals, nonmetals, and metalloids using physical properties such as luster, conductivity, or malleability; <b>6.6C</b> test the physical properties of minerals, including hardness, color, luster, and streak; <b>6.10A</b> build a model to illustrate the structural layers of Earth, including the inner core, outer core, mantle, crust, asthenosphere, and lithosphere; <b>6.10B</b> classify rocks as metamorphic, igneous, or sedimentary by the processes of their formation				
<b>21st Century Skills</b> to be taught and assessed:	Collaboration	X	Other: Creativity	X	
	Communication (Oral Presentation)	X	Technology	X	
	Critical Thinking/Problem Solving	X			
<b>Major Products &amp; Performances</b>	Group:	1. Product Plan 2. Product that contains Information on the rocks, their history and their uses. 3. A written proposal letter that tells which site is best and why.	<input type="checkbox"/> <b>Presentation Audience</b>		
			X	Class	
			X	School	
	Individual:	1. STEMScopes Explore - Lab Activity; 2. Core Sample Analysis Sheet; 3. STEMScopes Progress Monitoring Assessment; 4. Common Assessment		Community	
			X	Experts	
				Web	
		Other:			

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<b>Entry Event</b> to launch inquiry, engage students:	<ol style="list-style-type: none"> <li>1. Letter from Wylie’s Economic Development Corporation</li> <li>2. Bill Nye video on “Rocks and Soil”</li> <li>3. Poster with pictures of the different sites they will be analyzing.</li> </ol>				
<b>Assessments</b>	<b>Formative Assessments</b> (During Project)	Quizzes/Tests	X	Practice Presentations / Critical Friends	X
		Journal/Learning Log	X	Notes	X
		Preliminary Plans/Outlines/Prototypes	X	Checklists	X
		Rough Drafts	X	Concept Maps	X
		Online Tests/Exams	X	Other:	
	<b>Summative Assessments</b> (End of Project)	Written Product(s), with rubric: Product Explaining the history and uses of rocks	X	Other Product(s) or Performance(s), with rubric: Proposal Letter to Wylie Economic Development Corp	X
		Oral Presentation, with rubric		Peer Evaluation	X
		Multiple Choice/Short Answer Test	X	Self-Evaluation	X
		Essay Test		Other:	
<b>Resources Needed</b>	<b>On-site people, facilities:</b>		Experts: Geologist, Economic Developer		
	<b>Equipment:</b>		Access to computers		
	<b>Materials:</b>		handouts/forms, core samples, misc. materials for non-technology products		
	<b>Community resources:</b>		pictures of available land for the different sites		
<b>Reflection Methods</b>	<b>(Individual, Group, and/or Whole Class)</b>	Journal/Learning Log	X	Focus Group	X
		Whole-Class Discussion	X	Fishbowl Discussion	
		Survey	X	Other:	